

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re Application of	:	Customer Number: 46320
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Frank LEYMANN, et al.	:	Confirmation Number: 5078
	:	
Application No.: 10/042,799	:	Group Art Unit: 2157
	:	
Filed: January 9, 2002	:	Examiner: A. Gold
	:	
For:		MANAGING A FAILURE TO ACCESS A DATABASE IN A COMPUTER SYSTEM

**REPLY BRIEF**

Mail Stop Appeal Brief - Patents  
Commissioner For Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This Reply Brief is submitted under 37 C.F.R. § 41.41 in response to the EXAMINER'S ANSWER dated June 14, 2007.

The Examiner's response to Appellants' arguments submitted in the Appeal Brief of November 22, 2006, raises additional issues and underscores the factual and legal shortcomings in the Examiner's rejection. In response, Appellants rely upon the arguments presented in the Appeal Brief of November 22, 2006, and the arguments set forth below.

Before addressing each of the Examiner's arguments presented in the Examiner's Answer, Appellants request the Honorable Board to consider the following critical differences between the claimed invention and the applied prior art. The teachings of the applied prior art assume

that either the first application server fails completely and/or the first application server is no longer capable of fully functioning. For this reason, the applied prior art reroutes requests initially directed to the first application server directly to a second application server. In contrast, the claimed invention contemplates the first application failing to access the database, but not completely failing. Importantly, since the first application server has not completely failed, the first application server, as claimed, is capable of routing the request to the second application server. The applied prior art, however, relies on agencies outside the first application server (e.g., a redirector 16, the client processor of Holmberg, or the client driver interface 204 of Rizvi) to route the request to the second application (backup) server. By having the first application server handle forwarding the request to the second application server, as claimed, the benefits described in the first full paragraph on page 3 of Appellants' disclosure may be realized.

#### Claim 1

On pages 4-8 of the Appeal Brief, Appellants argued, in part, that the Examiner failed to properly characterize the teachings of the prior art and the Examiner failed to establish a realistic motivation to modify the combination of Holmberg and Rizvi in view of Helmer.

The Examiner's response to these arguments are found on pages 8 and 9 of the Reply Brief. Initially, the Examiner responded as follows:

The Appellant argues that the Examiner has improperly "separated" the "while the first application fails to access the database" limitation from the limitation of sending a request of the application client for the first application server to the second application server. However, the Appellant provides no argument or proof as to why the examiner's claim construction is improper. Rather, Appellant has argued that Holmberg and Rizvi fail to disclose this feature, which the examiner has previously conceded. This limitation is taught by Helmer.

At the outset, Appellants note that the above-reproduced comments by the Examiner are not consistent with the Examiner's analysis in lines 2-3 on page 3 of the Fourth Office Action and in

lines 8-9 on page 4 of the Examiner's Answer, in which the Examiner asserted the limitation "while the first one of the two application servers (20, 21) fails to access the database" is disclosed by Holmberg. Moreover, although the above-reproduced comments by the Examiner state that Helmer teaches this limitation, the Examiner's assertions contained in the first through third full paragraphs on page 5 of the Examiner's Answer and in the last full paragraph on page 3 and the first and second full paragraphs on page 4 of the Fourth Office Action are not consistent with this analysis. Instead, the Examiner relies upon Helmer to teach "sending a request of the application client (15) for the first application server (21) from the first application server (21) to the second application server (20)" (see, for example, the third full paragraph on page 5 of the Examiner's Answer).

Notwithstanding the ambiguity as to what references or combination of references the Examiner is relying to teach what particular limitations, the issue raised by Appellants is not a matter of "the examiner's claim construction," as alleged by the Examiner. Instead, the issue raised by Appellants is that the Examiner has improperly dissected the claim limitations and, thus, did not consider the claimed invention, as a whole. The notion that the claimed invention be considered "as a whole" finds support both in the language of 35 U.S.C. § 103 and the case law. For ease of reference, the limitation at issue is reproduced below:

sending a request of the application client (15) for the first application server (21) from the first application server (21) to the second application server (20) while the first one of the two application servers (20, 21) fails to access the database. (emphasis added)

The Examiner is relying upon either Holmberg (or Helmer) to teach the above-underlined portion and Helmer (or Holmberg) to teach the non-underlined portion of this claim since neither reference teaches both limitations, in combination. The problem with the Examiner's analysis is that the claimed "while the first one of the two application servers (20, 21) fails to access the database" cannot be properly separated from the claimed "sending a request of the application client (15) for the first application server (21) from the first application server (21) to the second application server (20)" when considering the claimed invention as a whole. The limitation "while the first one of the two application servers (20, 21) fails to access the database" is incomplete and not a stand-alone limitation. Instead, this limitation modifies a base limitation (i.e., "send a request ...") and is directly related to this base limitation.

Appellants do not question that there are many teachings, in a multitude of references, of operations that occur while an application server fails to access a database. However, the fact that certain operations are taught as occurring while an application server fails to access a database may be coincidental or, if not coincidental, are for reasons specific to the operation being formed. The Examiner's rejection, however, has failed to put forth a realistic, common sense rationale why one having ordinary skill in the art would modify the base limitation (i.e., "send a request ...") with the partial limitation of "while the first one of the two application servers (20, 21) fails to access the database."

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The Examiner further asserted the following on page 8 of the Examiner's Answer regarding the teachings of Helmer:

The Appellant argues Helmer does not teach a failed server routing requests to a remote server and reproduces the column and line numbers, column 2, lines 2-15 and column 2, lines 46-59, from the Examiner's rejection in their appeal brief. The limitation in question is explicitly shown in both sections in column 2 on lines 11-13, "If a server fails, such as the local server, the remote server begins processing user requests based on the temporary data it received from the local server." and lines 53-54, "If the local server fails, the user request is routed to the remote server." As disclosed in these passages, Helmer clearly teaches "a failed server routing requests to a remote server." (emphasis added)

Apparently, the Examiner is heavily relying upon the above-underlined portions to teach "a failed server routing requests to a remote server." The Examiner's conclusion, however, is misplaced. Referring to column 2, lines 2-15, although Helmer teaches that the remote server using temporary data it received from the local server, Helmer is silent as to the remote server receiving the temporary data while the local server has failed. Instead, Helmer teaches that an application server 20A generates queries, which includes temporary data, and the temporary data is stored on file server 16A (column 5, line 66 through column 6, line 12).<sup>1</sup> Moreover, the temporary data can be replicated between multiple data centers 14A, 14B (column 6, lines 22-24, 59-64). If data center 14A fails, data center 14B continues processing user requests "with the benefit of the temporary data showing the user selections" (column 7, lines 20-29). Thus, Helmer teaches the backup data center 14B using temporary data that was received from an operational data center 14A. Therefore, column 2, lines 2-15 of Helmer does not support the Examiner's conclusion.

Referring to column 2, lines 53-54, although Helmer teaches that the user request is routed to the remote server, Helmer is silent as to the entity performing the routing. The claimed invention requires the failed server routing the request, but such a teaching is not found in Helmer. Helmer further discusses the routing technique in column 7, lines 35-39, in which

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<sup>1</sup> These queries described by Helmer are not comparable to the claimed request since the claimed request is being sent from the application client to the first application server, whereas the query of Helmer originates with the application server 20A (i.e., allegedly corresponding to the claimed first application server).

Helmer relies upon the routing technique described in U.S. Patent Application No. 09/021,091 (issued as U.S. Patent No. 6,735,631). As described therein, a redirector 16 changes the destination address of a user request to redirect the user request to one of a plurality of application server 12a, 12b. The redirector 16 is also described as also using this technique for failover. Thus, Helmer does not teach that the alleged first application server routes requests to the second application server, as claimed.

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In the paragraph spanning pages 8 and 9 of the Examiner's Answer, the Examiner further asserted the following:

The Appellant argues that the motivation to combine is improper and that it does not establish a realistic nexus between the proposed modification and asserted benefit. The Examiner disagrees and believes that there is a realistic nexus. Sending a request for the first application server from the first application server to the second application server is a faster and more efficient backup for the server than having another server retrieve the request from the first server to then send it to the second server. A faster and more efficient way to send a request from the first server to the second server is to directly send the request, which is the motivation for the combination. (underlined in original)

*Assuming arguendo* the Examiner's alleged benefit of a "faster and more efficient way" to send a request would motivate one having ordinary skill in the art to modify the teachings of Holmberg, then the claimed invention would not result. Instead, both Rizvi and Helmer teach directly routing a request received from a client to the second application server, which appears to be, by common sense, a faster way of routing the request to the second application server than indirectly routing the request to the second application server through the first application server. As such, if one having ordinary skill in the art were motivated to modify the applied art so as to obtain a faster routing technique, then the claimed invention would not result.

Appellants also note that the Examiner's assertion that directly routing a request for the first application server from the first application server to the second application server is a faster and more efficient way to send a request finds no basis in the applied prior art since the applied prior art does not teach this particular limitation. Therefore, the Examiner's assertion that this technique provides a "faster and more efficient way to send a request" is not factually supported.

Appellants further note that the Examiner again sets forth an ambiguous analysis. As noted above, the Examiner asserts that this combination provides a "faster and more efficient way to send a request," yet on page 5 of the Examiner's Answer and on page 4 of the Fourth Office Action, the Examiner's alleged benefit resulting from this combination is a "faster and more efficient backup for the server to forward the data to the backup server." Forwarding a request sent by an application client from the first server to a second server and backing up data are two very different concepts. Moreover, the Examiner mixes these concepts in the above-reproduced paragraph without explaining how "a faster and more efficient way to send a request from the first server to the second server" provides "a faster and more efficient backup for the server."

Therefore, for the reasons stated above, Appellants respectfully submit that one having ordinary skill in the art would not have been realistically impelled to modify the combination of Holmberg and Rizvi based upon the teachings of Helmer based upon the rationale submitted by the Examiner.

Claims 7 and 11

On pages 8 and 9 of the Appeal Brief, Appellants presented several arguments. Specifically, Appellants argued that claims 7 and 11 include limitations similar to those limitations contained in claim 1 that Appellants have previously argued are not disclosed by the combination of the applied prior art. Appellants further argued that whereas claim 1 is directed to method, claim 7 is directed to a system and the Examiner's analysis has not recognized the differences between these claims (i.e., methods recite steps whereas a system recites functional elements/devices). Regarding claim 11, Appellants noted that method claim 11 recites limitations not recited in claim 1.

On page 9 of the Examiner's Answer, the Examiner characterized Appellants' arguments and responded as follows:

With regards to the arguments of claims 7 and 11 of the appeal brief, the Appellant has the same arguments as for claim I, which are responded to above, and the Appellant argues the Examiner has not properly directed the rejections of claim 7 and 11 to their specific preambles.

In response., the recitations have not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. The Appellant admits in the appeal brief that the limitations in both claims 7 and 11 are comparable to claim 1.

The Examiner's response does not appear to appreciate Appellants' arguments. No matter the preambles, a method claim and a system claim are different types of claims. Moreover, despite claims 7 and 11 having comparable limitations to claim 1, the limitations are not identical. For example, claim 11 recites that the first application server forwards the response, which was received from the second application server, to the application client and this limitation is not contained in claim 1.



In this regard, Appellants note that each of claims 1, 7, and 11 recite that a response is sent from the second application server to the first application server (or a response is received by the first application server after being sent from the second application server). On page 4 of the Examiner's Answer, the Examiner relied upon column 3, lines 5-22 of Holmberg to teach this limitation. However, referring to Figures 1 and 2 of Holmberg, no paths are shown from the backup server 105/107 (i.e., the alleged second application server) to the primary server 101/103 (i.e., the alleged first application server). This deficiency is not cured by Rizvi (see Fig. 2) or Helmer. Instead, Holmberg teaches that a reply is directly sent from the backup server 105/107 to the client (see Fig. 1); Rizvi teaches that the backup database server 210 directly responds to the client 216 over the database connection 220 (see Fig. 2); and Helmer is silent as to what entity the response to the request is sent. Thus, these limitations further distinguish the claimed invention over the combination of Holmberg, Rizvi, and Helmer.

For the reasons set forth in the Appeal Brief of November 22, 2006, and for those set forth herein, Appellants respectfully solicit the Honorable Board to reverse the Examiner's rejection under 35 U.S.C. § 103.

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To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 09-0461, and please credit any excess fees to such deposit account.

Date: August 14, 2007

Respectfully submitted,

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CUSTOMER NUMBER 46320